

1856.

BOROUGH OF CARDIFF.

THE

THIRD ANNUAL REPORT

ON

SANITARY CONDITION OF CARDIFF.

[for the year 1856]

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OFFICER OF HEALTH.

PRINTED BY ORDER OF LOCAL BOARD OF HEALTH.

CARDIFF:

PRINTED BY HENRY WEBBER, "GUARDIAN" OFFICE.

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SANITARY CONDITION OF CARDIFF.

TO THE CARDIFF LOCAL BOARD OF HEALTH.

Cardiff, Feb. 22nd, 1856.

GENTLEMEN,—I have to-day to bring before your notice the sickness and mortality prevalent in this town during the past year. In doing this, I am enabled to shew a considerable decrease in the number of deaths, as compared with previous years; but satisfactory as this must be, an analysis of the mortuary table demonstrates that there still exists an excess over the average mortality of towns considered to possess a fair sanitary condition.

In order to correctly understand many of the following remarks, it is necessary to explain what may be the proper average mortality of a district classified according to its special constitution. A rural district has, according to the Returns of the Registrar-General, a mortality less than 2 per cent. A town district, with tolerable sanitary regulations, less than $2\frac{1}{2}$ per cent, or 25 per thousand; but in some towns, owing to a neglect or violation of such regulations, it reaches as high as 4 per cent., or 40 per thousand.

Within the last few years considerable attention has been paid to the laws influencing the prevalence of sickness; and it is no longer a

matter for conjecture why 40 persons die in one locality during a given space of time, while only 20 die in another. Science and observation has satisfactorily proved that this excess occurs in that class of disease called the Zymotic, or infectious, diseases; and it has been still more satisfactorily proved that these diseases are in many instances wholly excited, in others materially influenced, by removable causes. The nature of these causes, as far as they are applicable to this town, it will be my duty, as your Officer of Health, to bring before you.

In a former report I divided the town into certain districts, the several specialities of which it will be necessary to bear in mind.

The North district comprises that portion of the town which extends from Crockherbtown to Castle-street; it includes all streets opening into this line, being bounded on the south by Quay-street, Church-street, continued on through Ebenezer-street to Charles-street. It is upon a higher level than the other portion of the town. It is inhabited principally by gentry, professional men, and respectable tradesmen. It contains but few courts, these being in good condition, both pitched and paved.

The East district embraces Union-street, East-street, and all the adjacent streets lying between these and the upper part of the Canal, bounded on the north by a portion of that district, and on the south by Bute-terrace and Whitmore-lane, as far as Lewis-street, but does not include that lane. Its inhabitants are a few tradesmen, respectable mechanics, and labourers. Some of the streets—as Stanley-street, Love-lane, and Mary Ann-street—contain Irish lodging-houses. All the streets are pitched and paved; it has very few courts.

The West district comprises the streets between the Canal, Lewis-street, and the river Taff. In this district, St. Mary-street is inhabited by respectable tradesmen and others. The district has many courts in a bad sanitary condition, as Landore-court, Mill lane-court, Evans's court, and others. They are occupied by labouring and indigent Irish, who live in common lodging-houses.

The South district embraces Bute-street, and all the streets in Bute-town; is inhabited by respectable tradesmen, a better class of labourers, and, near the dock, by agents and others connected with

the shipping. Nearly the whole of these streets are unpitched, very inefficiently drained, and, being situate on a very low level, usually contain stagnant water and much mud, mixed with refuse vegetable matter. The area behind most of the houses occupied by labourers, being a large proportion, is frequently flooded with foetid water and cesspool soakings, the alluvial clay on which this district is built preventing the water from percolating.

The Newtown district is that portion of the town on the eastern side of the Taff Vale Railway. It has a low level; the streets have recently been pitched; the houses for the most part are occupied as Irish lodging-houses, and are seriously overcrowded.

The drainage of the town, except in the South district, is in rapid progress towards completion; is already made available in removing the surface water from the Newtown district, and has exercised a very beneficial influence on the health of the inhabitants of that district.

The water supply of the town is now good and ample. The Water Works Company supply about 2,700 houses. The water is obtained from Ely, is good for consumption, and, giving only 5 degrees of hardness, is equally applicable for household purposes. Their scale of charges enables you, in many instances where it is desirable, to enforce its supply, and has been a great boon to occupiers of small tenements.

The meteorological peculiarities were as follows:—The winter and spring quarters were unusually cold, the mean temperature being most weeks below the average of previous years, with the exception of a few days in April, but it soon became cold again, and continued so until the end of May. The prevailing winds were N.N.E. In June, the weather was remarkable for sudden changes from heat to cold. In July, the temperature was high; and warm weather continued through August, September, and the early part of October; November was cold and gloomy; the temperature was below the average in the early part of December, but rose the latter end of the month. The fall of rain throughout the year was below the average.

Having alluded to some of the data which exercise a sanitary influence over the inhabitants of this district, I have now to direct your attention to the Mortuary Tables.

The number of deaths from disease, and causes independent of disease, during the year ending December, 1855, was 641.

The following table illustrates the comparative mortality of the several seasons during 1854 and 1855:—

	1854.	1855.
Winter. { January.....	42	65
{ February	38	62
{ March	61	57
	<hr/> 141	<hr/> 184
Spring... { April	102	50
{ May	61	64
{ June	52	40
	<hr/> 215	<hr/> 154
Summer. { July	48	46
{ August	85	27
{ September.....	154	22
	<hr/> 287	<hr/> 95
Autumn. { October	119	51
{ November	54	44
{ December	49	55
	<hr/> 222	<hr/> 150
	<hr/> 865	<hr/> 583
Inquests.....	60	Inquests 58
Total	925	Total 641

An analysis of this table shews the thermal influence on the mortality, as during the winter and spring months, the deaths from acute inflammatory diseases were unusually numerous, being attributable to the severe and long-continued cold weather in these periods. Bronchitis was fatal in 44 cases, pneumonia in 27, and croup in 8—being a total of 79 cases; while the whole of the deaths from these causes during the year were only 103. In the corresponding periods of 1854, these diseases were fatal only in 23 cases.

The following is the comparative number of Births and Deaths in 1855:—

	Births.	Deaths.
Winter Quarter	270	184
Spring "	284	154
Summer "	264	95
Autumn "	281	150
Total	1099	583
		58 Inquests.
		<hr/> 641

The excess of births over deaths is 458.

The population of Cardiff is now computed to exceed 25,000, and is supposed to increase yearly at the rate of 8 per cent., being the proportionate rate of increase for the ten years previous to the last census, and which increase we have reason to infer has been since maintained. The difference therefore between the increase by births, 458, and the actual increase, 2,000, on the population, is made up by the immense yearly immigration. The effect of this on the sanitary condition of the inhabitants will be considered hereafter.

Assuming the population of Cardiff now to exceed 25,000, and the number of deaths for the last year being 641, the rate of mortality has been 25.64 per thousand, or rather more than $2\frac{1}{2}$ per cent. The rate of mortality of all England is slightly above 2 per cent.; but this includes rural and town districts, and does not therefore contrast fairly with Cardiff, entirely a town district. In my last report to your Board I gave the mortality of five towns, to enable you to form an opinion of the comparative mortality of Cardiff. This table was as follows:—

The Metropolis	...	...	...	...	...	30.40	per thousand.
Liverpool	...	...	...	...	...	30.50	"
Bath	...	...	...	...	...	20.60	"
Bristol	...	...	...	...	...	30.10	"
Clifton	...	...	...	...	...	20.10	"

The following is the rate of mortality in Cardiff during the last three years:—

Year.	Estimated Population.	Mortality.	Rate of Mortality per 1000 to Total Deaths.
1853	21,300	644	30.23
1854	23,000	925	40.21
1855	25,000	641	25.64

There has been therefore a decrease in the mortality of 15 per thousand as compared with 1854 (that year being remarkable for a visitation of cholera), and 5 per thousand as compared with 1853.

The deaths occurred in the following proportions in each district:—

North District	...	...	...	...	...	70
South	...	...	...	...	...	174
East	...	...	...	...	...	117
Western	...	...	...	...	...	116
Newtown	...	...	...	...	...	95
Public Institutions	...	...	...	...	...	69
						641

The following is a comparative table of deaths from disease and other causes for the last three years:—

		1853.	1854.	1855.	
SPORADIC DISEASES.	Diseases of Brain and Nervous System.	Convulsions	67	81	82
		Inflammation and Disease of Brain	8	13	13
		Apoplexy	2	1	3
		Paralysis	4	6	6
		Epilepsy	3	3	5
		Delirium Tremens	0	2	5
		Insanity	0	0	1
		Hydrocephalus	11	8	10
		Disease of Spine... ..	0	0	1
			— 96	—114	—126
	Diseases of Chest.	Phthisis	111	78	78
		Bronchitis	24	14	51
		Inflammation of Lungs... ..	32	38	39
		Pleurisy	1	0	0
		Croup	6	8	13
		Asthma	2	3	6
		Hydrothorax	0	1	0
		Empyema	0	0	1
		Laryngitis	0	0	2
			—176	—142	—130
	Diseases of Abdominal region, &c.	Disease of Heart... ..	2	6	11
		Disease of Stomach	3	0	0
		" Liver	8	9	6
		" Bowels	4	19	9
		" Kidney	1	3	2
		" Bladder	0	0	1
		" Womb	3	1	0
		Stricture of Esophagus	1	0	2
			— 20	— 32	— 20
		Zymotic Diseases, Epidemic and Endemic.	Fever Cont. and Typhoid	38	18	10
	" Puerperal		6	5	6
	" Scarlet		1	36	19
	" Rheumatic		0	0	3
	" Intermittent		0	0	1
	Measles		1	96	2
	Small Pox		42	1	0
	Hooping Cough		20	1	12
	Diarrhoea and Dysentery		22	26	17
	Cholera		5	175	1
Sporadic Diseases, Uncertain Seat.	Erysipelas	4	0	0	
		—139	—358	— 71	
	Phlegmon	0	1	6	
	Scrofula	1	6	9	
	Gangrene	2	1	6	
	Cancer	3	5	6	
	Syphilis	4	3	0	
	Hæmorrhage	1	3	0	
	Dropsy	9	14	9	
	Atrophy and Mesenteric	53	75	48	
	Hydrophobia	1	0	0	
	Hernia	0	1	0	
	Scorbutus	0	0	1	
	Teething	10	26	9	
	Other Diseases	11	20	2	
		— 95	—155	— 96	
Age	34	34	44		
Unknown	23	22	25		
Accidents	0	2	0		
Inquests	60	60	58		
Total	644	925	641		

It will be found that from diseases of the brain the mortality has been nearly stationary.

From diseases of the chest, owing to the thermal causes before alluded to, the mortality increased considerably, occasioned by acute inflammatory affections of this cavity. Bronchitis being fatal in 51 cases, inflammation of the lungs in 38, croup in 13, and laryngitis in 2.

From diseases of the abdominal cavity there has been a decrease of one-third.

From the zymotic or epidemic class there has been a most material decrease during the past year as compared with the preceding five years, as will be seen by the following table :—

Year.	Inquests.	Deaths from Sporadic causes.	Deaths from Zymotic or Epidemic causes.	Total Deaths.	Per centage of Deaths from Zymotic causes to total Deaths.
1850 ...	33	345	117	495	23.63
1851 ...	45	378	102	525	19.42
1852 ...	30	407	205	642	31.93
1853 ...	60	445	139	644	21.56
1854 ...	60	507	358	925	38.70
1855 ...	58	512	71	641	11.07

The table shews that in the sporadic class of diseases, or those diseases incidental to the individual, there has been merely the very gradual and progressive increase, coequal with the increase of population; but that when there has been a deviation from the ordinary pro-rata mortality that deviation may be referred entirely to the zymotic or epidemic class,—that class of diseases over which sanitary supervision exercises a most material influence, and which in the past year has been brought down as low as 71,—or but a portion over 11 per cent. of total deaths.

Among this class, simple or typhoid fever contributed but ten cases, which occurred in the following localities,—

Name of Street.	No. of Cases.	Condition of Locality.
Bute-street	1	Bad—an Irish lodging-house.
Little Frederick-st	1	
High-street	1	
Union-street	3	Introduced by an Irish mendicant.
Louisa-street	1	Street contained stagnant water and offensive decaying vegetable matter.
Herbert-street ...	1	Same.
James-street	1	Same.
Brick-yard	1	Large pool stagnant water.

Diarrhœa and dysentery contributed 17 cases; these were distributed over the following localities :—

Mary Ann-street	1	Hayes	1
Henry-street	1	Christina-street	2
Union	1	St. Mary-street	1
Unknown	1	Tredegar-street	1
Tavernacle-court	1	East-terrace	1
Peel-street	1	Loudon-square	1
Millicent street	2	William-street	1
High-street	1		
		Total	17

Of these, 13 were cases of infantile diarrhœa, and were probably dependent more or less on dentition; one was a tramp, aged 64, in a lodging-house, in Mary Ann-street; one, the inmate of the Union, aged 81; one a coal-heaver's child, aged 11; one a case of dysentery.

There was registered one case of cholera, in the month of October, —a tradesman's wife, residing in the Hayes. No cause was assigned, but it probably owed its origin to some sporadic influence.

Whooping cough was fatal in 12 cases, occurring in the latter part of the year.

There were holden, during the year, 58 coroner's inquisitions. According to the evidence, death was attributed to the following causes :—

Injuries—principally railway, shipping, and in public works ...	18
Drowned—principally sailors	25
Natural Causes, as Apoplexy, &c.	9
Burns and Scalds	3
Accidentally Smothered	1
Murder	1
Suicide	1
	—58

This cannot be considered a large number when it is borne in mind that the majority of these resulted from the nature of the labour exposing those employed to accidents, as the railway, the large works now carried on in the formation of new docks, and the shipping.

The case of supposed murder was that of an infant newly born, whose limbs were dismembered, and found floating with the body in the Canal.

The case of suicide was occasioned by poisoning with laudanum.

The 641 deaths occurred in the following proportion among the different occupations :—

Gentry, Professional Men, and their families	12
Tradesmen, Agents, Master Mariners, &c., and their families	106
Journeyman, Mechanics, Labourers, &c., and their families	463
Seamen, and their families	52
Soldiers, Pensioners, and their families	8
	—641

The deaths occurred at the following ages:—

Under one year	...	...	...	...	...	206
" two years	...	...	...	...	...	51
" three years	...	...	...	...	...	27
" four years	...	...	...	...	...	14
" five years	...	...	...	...	...	9
Five and under ten	...	...	...	...	...	26
Ten " twenty	...	...	...	...	...	45
Twenty " thirty	...	...	...	...	...	57
Thirty " forty	...	...	...	...	...	55
Forty " fifty	...	...	...	...	...	52
Fifty " sixty	...	...	...	...	...	29
Sixty " seventy	...	...	...	...	...	43
Seventy " eighty	...	...	...	...	...	18
Eighty and upwards	...	...	...	...	...	10
						641

Perhaps the most unfavourable aspect under which the mortality of Cardiff, during 1855, can be viewed, is when we consider the rate of infant mortality. Thus, the number of children who died under five years during this period has been 306, or 47.73 on the total number of deaths of all ages. In order to estimate this proportion in its proper bearing, I have selected the following localities with their rate of infant mortality, calculated from returns made to the Registrar-General, as appears in his last Report:—

	Per centage of infant mortality to total deaths.
All England	40.77
Metropolis	43.02
Merthyr	52.81
Seaport & Trading town	42.80
Seaport	50.50
Agricultural	27.56
Seaport	Cardiff, in 1855 ... 47.73

This table shews, in the strongest manner, the favourable effect on infant life of a purely agricultural locality. Thus the town of Hereford, depending as it does on the trade and steady labour incidental to an agricultural district, offers little inducement to a larger number of labourers, than the labour market requires,—with a pure, natural atmosphere, it avoids the contamination of the manufacturing and usually crowded trading towns, and its mortality of infant life falls to 27 per cent; while Merthyr, a mining town, and Liverpool, a seaport town, rise in the one instance to 52, in the other 50 per cent. of total deaths.

Bristol, a mixed trading and seaport town, has a mortality in infant life of 42 per cent., while Cardiff, to a certain extent, as a mixed trading and seaport town, rises to 47; thus, exceeding its near neigh-

bour by 5 per cent. The cause of this excess we have now to consider.

Perhaps there are few towns in England, with the large population of Cardiff, so unequally divided as to classes,—offering few attractions for a residence, except as connected with its trading interest; it has a very small proportion of gentry, while the great and increasing demand for labourers, causes a constant influx of that class; and, as is too frequently the case, beyond its requirements; while its proximity to Ireland, and the facility of transit, constantly pours into the town a large number of mendicant Irish; although the number of houses yearly increase, it by no means keeps pace with the increase of population. In 1851, the census shewed an average exceeding seven inmates to every house. The ordinary average in the kingdom being five. Hence, all the evils of the over-crowded lodging-houses, which I have had occasion so frequently to bring before your notice.

This excess of labouring population, with a minimum supply of house accommodation, causes an extraordinary high rate of house rent. In the Newtown district, houses erected at a cost, probably, of from £105 to £110, have no difficulty in obtaining a tenant who pays from 5s. 6d. to 6s. per week. The occupier, a labourer, earning, probably, but 12s. weekly, to meet this rent, occupies one room, and sublets the others, at prices varying from 1s. 6d. to 2s. 6d. per week. The subtenant too, frequently, takes in lodgers; and it is by no means uncommon to find in one room, measuring 14 by 12 feet, four or even six beds, occupied sometimes by adults, in others by married couples. Two and, in some instances, three families with children occupy the same room. Occupying it night and day, there can be but little ventilation, unless it is compulsory. Living in the vitiated atmosphere of such dwellings, the constitution of the parents become broken, and the offspring necessarily deficient in physical strength: hence the large number who die within the first few weeks of existence, from infantile diseases,—as convulsions, atrophy, and mesenteric disease; this is instanced by the circumstance, that during last year 201 children died under the age of one year. According to the returns made to me by the inspector of lodging-houses, I find that the number of inmates vary from 9 to 23.

The peculiar effect of this state of things on the chances of living among the offspring of the poor, may be well exemplified by comparing the mortality of Cardiff and that of our near neighbour,

Merthyr, in the two phases of infantile life—one year and five years.

	Deaths under one year.	Per centage of total Deaths.	Deaths under five years.	Per centage of total Deaths.
Merthyr	623	22.03	1250	52.61
Cardiff	201	31.20	306	47.73

In Merthyr, out of every hundred, 22 children die before they reach the age of one year. In Cardiff, the extraordinary number of 31 per cent. die during the same period of life. Merthyr thus loses 7 per cent. less than Cardiff. But when we again compare the mortality under the age of five years, Merthyr becomes in excess,—the deaths there being 52 per cent., Cardiff being 47 per cent.; and I have little difficulty in attributing the large number of children who die in Cardiff under the age of one year, to that quota furnished by the inhabitants of the district where the houses are occupied by the miserable class of Irish mendicants and lowest description of labourers. That there is an excess of inmates to each house in Cardiff beyond that of Merthyr, is borne out by the census return of 1851.

Cardiff, in 1851, had a population of 18,351, residing in 2,565 houses, or more than 7 inmates to each house. Merthyr, in the same year, had a population of 63,080, residing in 11,684 houses, or 5 inmates to each house. I have also every reason to believe that a much larger proportion of the class of Irish reside in Cardiff than in Merthyr.

The greatest evil, therefore, to which I have to direct your attention on the present occasion, is the overcrowded condition of the houses of the poor, especially in the Newtown district; this arising from the disproportion between the inhabitants and the house accommodation; the landlord taking advantage of the great demand by putting on a rent entailing the necessity of the tenant of the house subletting the rooms, the tenant of the room subletting the beds. The extent to which this reaches can hardly be conceived. I shall here introduce a few instances.

No. 1, Whitmore-lane, a cottage with four rooms, formerly let at 7s. per week, has been recently raised to 9s., the tenant having to pay a water-rate as well. The other miserable hovels in this lane vary from 5s. to 6s.

The internal condition of these houses can be imagined by the description of one of them. No. 6 is let to Bartholomew Sullivan, for

6s. a week rent, and 2d. water. Sullivan, his wife, and two children, occupy the front ground-floor, using it also as a fish shop for selling dried fish, the smell being most offensive; the back room is let to E. Feen, who pays 2s. rent, he occupying it with his wife, and three children; one room upstairs, measuring 8ft. by 8ft., is rented by Daniel Grace and wife, who pay 1s. 6d. per week, there is no chair or furniture in this room beyond the bed; the adjoining room, the same size, is occupied by three young women, who each pay 1s. Thus, for a house barely worth £50, 6s. per week rent is paid; the tenant, after occupying one room himself, realises 6s. 6d. by sub-letting the remaining three rooms. The other houses reveal a similar condition; but it is not alone the interior of these houses that are bad, but the exterior is, if possible, worse. The lane in front is at times offensive, from putrid mud and other impurities; but the area behind is worse. So strongly marked is the character of the locality, that on one occasion, upon visiting it with Mr. Grainger, one of the Board of Health inspectors, he remarked to me that he should expect to find here a disease, sloughing of the genitals, peculiar to children when exposed to the poisoned atmosphere of overcrowded houses and filthy localities. I had, singular enough, seen one in that court but a fortnight previous, and which had terminated fatally. I have also, within the last few weeks, attended a child in the same locality, with sloughing of the parietes of the abdomen doubtless arising from the same cause.

When I visited No. 6, Morgan-street, for the purpose of certifying as to its condition, with the view of granting a license for receiving lodgers; it was in a most offensive condition. It was then let to Dan. Collins for 6s. per week, the rent having been recently raised. Dan. Collins, his wife, and a son aged 18, sleep in the front room down stairs; the back room down stairs was let to William Williams, for 3s., who occupied it with his wife and four children. The furniture, consisting of a table, a chair, and two beds lying on the stone floor. The front room upstairs, measuring 10 by 15 feet, was occupied by three families—John Gould, his wife and child, who paid 1s. 3d. per week; John Green, who paid 1s. 3d. per week; and Henry Johnson and wife, who paid 2s. The back room was occupied by George Owen and wife, who paid 3s. per week.

A considerable portion of Newtown, until lately, presented the like evil, in a greater or less degree.

The extent and its consequences may be estimated by the following table, extracted from my report made to you last year. It is also contrasted with a locality more favourably placed.

Street.	No. of Houses.	Population.	Average No. of Inmates to each house.	Deaths in 1854	Rate of Deaths to 1,000 inhabitants.	Class of Inhabitants
Ellen-street ...	33	437	13 $\frac{1}{2}$	24	54.91	Irish and Irish men-dicants.
Pendoylan-st. ...	29	219	10	12	59.31	
William-street.	33	429	13	21	48.95	
Thomas-street.	28	340	12 $\frac{1}{2}$	15	44.11	
	123	1425	12 $\frac{1}{2}$	72	50.52	
Crockherbtown	64	402	6 $\frac{1}{2}$	11	27.36	Gentry & Professionals. Tradesmen and their Families.
Charles-street .	35	222	6 $\frac{1}{2}$	3	13.51	
High-street ...	31	176	5 $\frac{3}{4}$	3	17.04	
Angel-street ...	17	92	5 $\frac{1}{2}$	2	21.73	
	147	892	6 $\frac{1}{2}$	19	21.30	

To reduce the evils arising from the lamentable condition of the localities above cited, has engrossed a good deal of my attention during the past year, and that of the inspector placed by your Board under my control; he reports to me daily the visits he has made during the previous 24 hours—a certain number being made during the day,—when he has to ascertain the internal condition of the house as regards cleanliness,—whether the windows of the bedrooms are raised, the beds opened, and whether any nuisance exists on the premises. In the night he ascertains the number of inmates, and he issues instructions for their amendment when any deviation from the regulations he has received takes place. Should these instructions not be followed, he has to obtain summonses for the appearance of the offenders before the magistrates.

He reported to me the result of 14,124 visits made in day time, and 9,816 visits made in night. I can fully testify to the attention paid by P.C. Hihhs, the inspector, to this duty, and the great advantages resulting from it. The houses are more cleanly, better ventilated, and less crowded. I believe this has greatly assisted in reducing the number of deaths from zymotic disease,—while one remarkable circumstance corroborates this,—not a single death from fever occurred in this locality during the year, although it contained a population of Irish exceeding 3,000.

A practical illustration of the great advantages that have been

derived from this constant sanitary supervision exercised over the districts, formerly the constant habitats of fever and infectious diseases, will be understood by a comparison of their former and present condition. In the year 1849, an inquiry into the sanitary condition of Cardiff, was instituted for the first time, and evidence was given as to the state of Stanley-street, Landore-court, and other localities. Mr. Superintendent Stockdale stated in evidence, that "in one house, kept by Michael Harrington, 54 persons nightly sleep there. They live, eat, and sleep in the house. The smell arising from the rooms is overpowering. In another house, close adjoining, there were two ill with fever; there were two others just recovering. In most of the other small houses there were 14; but in John Brient's house there were 36 men, women, and children. There is no regard to decency. There are no tables, chairs, forms, or furniture of any description in the house, which is in a filthy condition; the inmates eat and sleep in the same room; the stench arising from this place is beyond anything that can be conceived, as the house is without ventilation. In Mary Ann-street, I have sometimes found the houses crowded to suffocation. In Landore-court, there are 27 houses. All the observations I have made with regard to Stanley-street, apply here. I should think nearly 500 persons live in these houses. Kenton's-court is in the same condition." This was also the condition of a considerable portion of the town. Between 1846 and 1849 there were four epidemics prevalent in Cardiff, the severity of these was felt in the following localities in a very severe degree. The subjoined extracts are made from the Poor-Law Medical Relief Book:—

LOCALITY.	TYPHUS FEVER.		DYSENTERY.
	1846-1847.	1847-1848.	1847-1848.
	Cases.	Cases.	Cases.
Stanley-street	75	23	13
Landore-court	48	24	8
Mary Ann-street	32	4	2
Kenton's-court	14	14	5

In 1849, epidemic cholera prevailed in this town, and caused extensive mortality in the four localities, namely, in—

Stanley-street	19 deaths.
Landore-court	8 "
Mary Ann-street	12 "
Kenton's-court	13 "

After this year, the local authorities instituted a system of supervision, and great attention was paid to these and the other localities

considered the infected districts. In 1854, cholera again broke out in this town. The benefits of this supervision appearing by inspection of the Register Book, showing the mortality in the streets just enumerated; while the following is the comparative effect at the two periods:—

	1849.	1854.
Stanley-street	19	1
Landore-court	8	2
Mary Ann-street	12	2
Kenton's-court	13	0

These localities being inhabited as common lodging-houses, admitted of the application of sanitary supervision. But there were certain other localities not coming under this denomination, to which circumstance it could not be enforced, where the epidemic prevailed fatally on the two occasions, in the following proportions:—

	1849.	1854.
Millicent-street	18	16
Bridge-street	5	5
Great Frederick-street ...	4	3

Thus exhibiting in a marked degree, the beneficial effect of sanitary supervision when epidemics unfortunately prevail.

During the last two years, not a single death from fever has been registered in Stanley-street, Landore-court, Mary Ann-street, or Kenton's-court; while a reference to the Medical Relief Book, since 1849, rarely shews a case of fever in these streets, the same book proving, that before this period Stanley-street and Landore-court were rarely ever without fever. The houses are now cleanly and frequently white-limed, ventilation is enforced, and the atmosphere of the rooms is no longer of that sickening and offensive character which they heretofore presented in so marked a degree.

An Act of Parliament was passed during the last session, empowering your officer of Health to order a reduction of the number of inmates in any house, when necessary; and from this I anticipate great advantage, as it has placed under his control all houses over-crowded; but which have hitherto evaded sanitary supervision.

There are at the present time upwards of 950 houses (393 being Irish lodging-houses), in which more than two families reside. These circumstances, at times, call for sanitary interference; many of them are constantly offending against the health of Town's Act, by permitting adults of different sexes to occupy the same room; as it is by no means uncommon to find two and three beds in one room occupied

by married couples and their children. On one occasion, recently, during a night inspection, I found in a small tenement, or rather room on the ground floor, in the locality called the Little Steam-mill, measuring 8 by 11 feet, with no window for ventilation, or other source, except through the door-way, three beds, two of them occupied by Irish women; the third contained a young girl in fever, and lying at the foot of the same bed was an adult Irishman, in no way related to her. These inmates had no idea of the immorality, and were incensed when I called attention to the manner of conducting the establishment. Instances of this character are by no means rare, and require the constant supervision of your inspector.

Another evil, to which your attention should be directed, is the absence of either water-closets or other accommodation, as is the case with the houses on the Tunnel,—there is no thorough ventilation; they are over-crowded; have no backlet; and all accumulations of an offensive character are retained in the bedrooms until night, when they are emptied into the canal. These houses suffered severely from cholera in 1854.

A house in the row between Smith-street and Queen-street is also in the same condition.

The condition of the streets in Bute-town has been repeatedly brought before your notice. Refuse vegetable matter is constantly thrown into the roadways, and these, being unpitched, contain much stagnant water and mud, and at times are very offensive. The following streets offer instances of this serious evil:—Christina-street, Frederica-street, Maria-street, Sophia-street, Nelson-street, Francis-street, the roadway facing the houses on Canal side, Alice-street, Henry-street, George-street, James-street, William-street, Louisa-street, Evelyn-street, Adelaide-street, Stuart-street; and—in New-town—Duffryn-street, Garth-street, Morgan-street, Godfrey-street, Pellat-street, Tyndal-street, and Herbert-street. Louisa-street at present offers a very aggravated instance of this evil.

The means necessary to improve the sanitary condition of the town, which I have more particularly to recommend to your notice during the coming year, will be—to reduce the number of inmates in houses when overcrowded—to enforce frequent cleansing and white-liming—to compel owners or occupiers of house property to adopt means for removing accumulations of stagnant water and impurities in the back areas—to enforce your bye-laws in reference to the practice of throwing

vegetables and other matter into the unfinished streets—and to compel the pitching of courts and alleys, the latter of which produced strong evidence of its salutary effect during the prevalence of the cholera epidemic of 1854.

I have thus detailed the amount of sickness and mortality, with some of the most prominent causes influencing it, during the last year; I have endeavoured to be as concise and practical as the subject will admit; I have avoided all theoretical views, and confined myself to simple facts and their results, as revealed by the Register of Births and Deaths. I can but congratulate your Board upon the near approach this town is making to the mortuary rate of a locality possessing fair sanitary regulations, an opinion founded not on its simple comparison with the previous year, but a comparison with the mortality of six years. In conclusion, I assure you that my best efforts will continue, as they have hitherto been, so directed, that by firmly executing the powers vested in my office, we may, with careful sanitary supervision, attain the lowest possible rate of mortality which a town peculiarly constituted as Cardiff will admit.

I have the honour to be,

Gentlemen,

Your obedient servant,

H. J. PAINE, M.R.C.S., &c.,

Officer of Health.